

ABSTRACT OF THE DISCLOSURE

The present invention provides a telecommunications system and method for connecting to a network and for routing data messages between the network and subscriber terminals of the telecommunications system. The subscriber terminals are connectable to a central terminal of the telecommunications system via a transmission medium, with the telecommunications system providing a number of communication channels arranged to utilise the transmission medium for transmission of data between the central terminal and the subscriber terminals. The telecommunications system comprises a transmitter within the central terminal for sending a data message destined for a particular subscriber terminal over at least one of the communication channels as a number of data blocks. Further, a frame generator is provided within the central terminal for generating a number of frames to represent each data block, each frame having a header portion and a data portion. The header portion is arranged to be transmitted in a fixed format chosen to facilitate reception of the header portion by each subscriber terminal, and is arranged to include a number of control fields for providing information about the data portion. In contrast, the data portion is arranged to be transmitted in a variable format selected based on predetermined criteria relevant to the particular subscriber terminal to which the data portion is destined. This approach provides a particularly flexible and efficient technique for transmitting data within the telecommunications system.

[FIG. 6]